ANNEXURE – B

TECHNICALS SPECIFICATIONS OF EQUIPMENTS & ITEMS FOR DISTRICT HOSPITAL

I. IMAGING EQUIPMENT

S. No.	Name of the Equipment	District Headquarters Hospital (201-300 bedded)
1	500 M.A. X-ray machine*	1
2	Dental X ray machine	1
3	Ultra Sonogram (Obs & Gyne. department should be having a separate ultra-sound machine of its own)	2 + 1
4	Echocardiogram*	1

I. IMAGING EQUIPMENT

1	Required Specification 500 M.A. X-ray machine*	1

Item No. 1 TECHNICAL SPECIFICATIONS FOR VISION- 500 X-RAY MACHINE WITH HORIZONTAL TABLE

1. TUBE UNIT: Rotating Anode Tube Unit with Focal spot 1.2 and 2.0 Sq.mm. THX-1/125/DRA-1/20/40.

2. HV CABLE: Pair of 6 meter High Voltages Cables. Sleeving – Straight.

3. STAND: Floor to Ceiling Stand & with Counter balanced movement, 360 Degree rotatable; mounted on floor ceiling rails for convenient movements.

4. TABLE: Horizontal Table with Motorized Bucky & Grid with ratio 6:1

5. HV TRANSFORMER: Compact Heavy Duty transformer comprising HV Silicon Rectifiers, HT Transformer, Filament Transformer, Federal Bushing all immersed in oil.

6. GENERATOR: 500mA, 125 KVP Full Wave Silicon Rectified X-GENERATOR for Radiography, Fluoroscopy & Spot Filming. As per IS: 7620 Part-I.

1. RATING: RADIOGRAPHY:

Small Focus: 100mA - 40 to 125KVP
200mA - 40 to 125KVP.

Large Focus: 300mA - 40 to 125KVP
400mA - 40 to 125KVP
500mA - 40 to 125KVP

8. STATIC BALANCER: Phase Reducing Transformer. 50 KVA- 3 Phase Transformer.

9. ACCESSORIES: Hand switch with Flexible long cord enables the operator to keep from the Radiation area during exposure. Aluminum Filters 1.5 mm

10. COLLIMETER: Light Beam Diaphragm with auto time cut off.

11. POWER SUPPLY REQUIRMENT: 400/440V, 3 Phase 50 Hz, 50 KVA.

2	Dental X ray machine	1

SPECIFICATION: -

-Should be new life Radiology Tube Head.

-Microprocessor based digital timer with an accuracy of 0.1secs.

-Hand operated switch to be provided for X-ray exposure.

-Exposure time: set by soft touch buttons.

-Automatic power cut-off at low/high voltage for the safety of X-ray tube.

Models: Stand type or Wall mounted.

Required Specification of X-Ray Tube Head:-
Type 70KV
Max. Power 1500W
Anodic current 8mA
Anodic tension 70KV
Focal spot 0.8
Focal distance for film 20cm
Equiv. filtration 2mm.AL
Power supply 230V50Hz
Max. Value of leakage Radiation X-Ray head 1mR
With MANUAL X-RAY DEVELOPER,
A set of X-ray Film Developing Chemicals
& X-ray Film 25 Sheets Packed.

3	Ultra Sonogram (Obs & Gyne. department)	2 + 1

SPECIFICATION:-

Scanning method: Linear/ Convex electronic scan.

Display: Minimum 9" B/W CRT monitor, with 256 grayscales.

Display mode: A mode, B mode (single), B/B mode (double), B/M mode

Probe connector: 2 Probe connectors is standard

Probe: 3.5 MHz triple frequency Convex probe

7.5 MHz triple frequency Transvaginal probe.

Image Storage: Minimum 60 Image Non volatile Flash memory

Cine loop: At least 50 Frame Cine loop

Patient Name & ID Storage: At least 1000 Patients

Image Adjustment: Dynamic Range: 35 to 95dB with 10dB Steps
B- Gain, M-gain 36 ~ 100dB with 1 dB steps
STC 6steps sliding volume on adjusted depth levels

Image Processing: Frame correlation on (2-step) / off selection
Line correlation on (2-step) / off selection
Gray curve selection in at least 8 steps

Measurement function: Distance, Circumference, Area, Volume, Angle, Gestational week's calculation, Histogram and LV calculation

Standard Accessories: Trolley, Servo-stabilizer, B/W thermal printer Foot switch and Biopsy guide.

10	Echocardiogram*	1

II . X-RAY ROOM ACCESSORIES

Sl. No.	Name of the Equipment	District Headquarters Hospital (201-300 bedded)
1	X.ray developing tank S.S, 4.5, 9, 13.5 Ltrs with lid	2
2	Safe light X.ray dark room Size: 5" x 7"	3

3	Cassettes X.ray, All sizes except 14x14”	15
4	Lead Apron, Full front side	3
5	Intensifying screen X-ray All sizes except 14x14”	3
6	Half Blockers	3
7	X-Ray Adoption Goggle	3
8	X-Ray Lead Markers	3
9	Processing tray	3
10	X-Ray Film Cutter	3
11	Drying Cabinet (Automatic)	3
12	X-Ray Film Hangers SS	3

III CARDIAC EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital (201-300 bedded)
1	ECG machine computerized	1
2	12 Channel stress ECG test equipments Tread Mill *	1
3	Cardiac Monitor	4
4	Ventilators (Adult)	2
5	Ventilators (Paediatrics)	1
6	Pulse Oximeter	4
7	Pulse Oximeter with NIB.P*	1
8	Infusion pump	2
9	B.P.apparatus table model	15
10	B.P.apparatus stand model	15
11	Stethoscope	20

1	ECG machine computerized	1

“**Complete Hardware & Software for PC ECG Computerised windows based**
12-channel ECG System the having following Specifications:-

FEATURES:

- Simultaneous acquisition of 12 leads.
- Automatic or normal measurements
- Adjustable gain, sweep speed and filters.
- Reconfigure lead section at any time during acquistion.
- Selectable lead colours on screen and print outs.
- Storage on hard disk and floppies.

- Storage of different visits or multiple ECG pages in the same file for easy retrieval record keeping and comparison.
- Easy connectivity with Laptop & desktop PC.
- Economical print uts on a standsrd a4 paper with & without grid.
- Automatic measurement of Amplitude of all 12 leads. AXISP QRS and T.
- Various intervals/ during's PR,RR, QRS, QT, QTC.
- Facility to print name of a discase and its Impression on each page of the ECG data.
- Split Screen.
- Comprehensive reports can be printed for all display types of Review and Analysis.

TECHNICAL SPECIFICATION:-

- Frequency response : 0.05 to 100 Hz.
- Sensitivity : 20.35 or 100Hz.
- Sweep Speed : 12,25,50 and 100um/1 sec.
- Muscle tremer filter : 20,35 or 100Hz.
- Amplifier : Sampling frequency 1000Hz.
  Dynamic Range $\pm$ 1 – 30m
- CMRR : 100DB.
- ADC : 14 Bit.
- Computer : IBM Compatible System with windows 95/98 loaded and
- Minimum : 32 MB Ram
- {Printer : Any Printer Supporting Windows.

(With CPU, Monitor, Printer, UPS with 1 Hour battery back up & ECG Chart)

3	12 Channel stress ECG test equipments Tread Mill *	1

PC based Exericese Stress Test System (TMT) condidting of:-

FEATURES:-

- Optically isolated amplifier.
- State-of-the-art windows based stress test software.
- Online/offline printing.
- Performs both resting 12 lead ECGs and stress tests on one system.
- Antistatic treadmill bell.
- Digital filter noise and distortion free recording.
- Frequency response – 0.05 to 100 Hz.

a) TMT HARDWARE KIT

- CARDIO treadmill.
- Stress Test Acquistion Box.
- TMT Acquisition, Review & Analysis Software on CD.
- **Computer Hardware**

- Pentium IV, HDD 40 GB, RAM –128MB, CD ROM Drive, 15"Coloured monitor, Laser Printer, Me/XP installed on HDD, Keyboard, Mouse, Mouse Pad.

4	Cardiac Monitor	4

4. Patient Monitor should be of Integrated design

It should be Slim design with a thickness of about 7 cms & Light Weight (< 2.5 Kgs inclusive of battery and charger)

1. Monitored Parameters – 3 and 5 Lead ECG, SpO2, NIBP, Resp, Temp (2 Ports), IBP (2 Ports) and EtCO2 (Microstream Applications)
2. Display – 10.1 inch minimum, Wide Screen, Color thin film transitive (TFT) liquid crystal display (LCD) with resistive touch screen
3. Waveforms – Upto Five
4. Capability to change Waveform Color
5. Capability to view bigger Font of the displayed parameters
6. 120 hours of Graphical & Tabular Trends of the monitored parameters
7. Battery back of upto 5 hours
8. Monitor should be able to viewed and readable from a wide angle and from an appropriate distance
9. Monitor should have capability for network connectivity to its Central
10. Modular Recorder Unit (Thermal) with 2 channel recording
11. Monitor should avoid using an "Internal Fan" and should have good mechanism to dissipate heat with ease in maintenance
12. Monitor should have capability for a easy software upgrade preferably using an USB Memory Stick
13. Monitor should simplify user interaction by offering Single Level Menu applications
14. Monitor should have capability to offer Integrated demo mode
15. Monitor should not have an external charger outside and should offer charging capability by using a standard 3 – pin power cord
16. Standard Accessories: 3 Lead or 5 Lead ECG Cable, Adult or Pediatric Cuff, Adult SPO2 Probe, Rectal or Skin Temp Probe & Wall or Table Mount with or without bed hook
17. Should be able to offer the monitor base in either White or Black color
18. Should be able to operate in AC mains range of 100 V – 240 V
19. Monitor should be able to operate with lesser power consumption (about 30 W internal power supply)
20. Monitor should be capable to be mounted on a Wall Mount / Table Mount / Roll Stand with or without a Bed Hook
21. Monitor should be able to display multiple ECG leads waveforms simultaneously with both 3 and 5 Lead ECG Cable
22. Monitor should be US-FDA & CE approved

6	Ventilators (Adult)	2

SPECIFICATION:

Patient Range: Neonatal, Pediatric, and Adult in one system.

Ventilation Modes: **Adult & Pediatric:**

Volume Controlled (VCV), Assist/Control
Pressure-Controlled (PCV), Assist/Control
Pressure Support (PSV)
Continuous Positive Airway Pressure (CPAP)

Combined Mode:
SIMV (VCV) + PSV
SIMV (PCV) + PSV
Mandatory Minute Ventilation (MMV) + PSV
Tidal Volume Assured + PSV
APRV
Non Invasive Ventilation & Bipap mode
Neonate:
Pressure Controlled (PCV), Assist/Control
Pressure Support (PSV)
Continuous Positive Airway Pressure (CPAP)
SIMV (PCV) + PSV
Time Cycled, Pressure Limited (TCPL) with Continuous Flow
Backup Apnea Ventilation:
Adult and Pediatric applications: VCV or PCV
Neonate applications: PCV

Controlled Parameters:

Tidal Volume:	20 to 2500 mL
Minute Volume:	1.0 to 45 L/min
Aspiratory Time:	0.1 to 30 Sec.
I:E Ratio:	60:1 to 1:199
Machine Rate:	1 to 150 bpm
FIO_2:	0.21 to 1.0
O2 100%:	Begins oxygenation sequence for suction
Trigger Sensitivity Flow:	0.5, 2, 3, 4, 5 L/min
Trigger Sensitivity Pressure:	0.5 to 10cm H2O below PEEP
PEEP/CPAP:	0 to 50 cm H2O
PCV:	3 to 70 cm H2O above PEEP
PSV:	0 to 70 cm H2O above PEEP
Expiratory Sensitivity (PSV):	5 to 40% of delivered peak flow
Aspiratory Pause (Volume mode):	0 to 2 s
Expiratory Pause:	To measure auto PEEP
Sigh (Volume Mode)	
Rate:	5, 10, 20, 15, 20 per hour
Multiple sighs:	1, 2, 3
Sigh Volume:	0.1 to 2.0 L Maximum pressure limit
Manual Inspiration:	One inspiration
Flow Waveform	
VCV:	Rectangular, Descending Ramp, Sine, Ascending Ramp.
PCV & PSV:	Descending ramp.
Aspiratory Flow:	2 to 180 L/min.
Continuous flow (NEO):	2 to 30 L/min.
Limited Pressure (NEO):	2 to 70 cm H2O

Maximum Limited Pressure [$P_{lim, max}$]
Relief valve: 100 cm H2O

Minimum Limited Pressure [$P_{lim, max}$]
Aspiratory relief valve: 5 cm H2O

Other Controls:

Trends:	Airway Pressure, Tidal Volume, Minute volume, Rate, Aspiratory flow, Dynamic compliance
Activated Alarms:	It presents a list with all the activated alarms of the last 24 hours
Oxygen Monitoring Cell:	Connected in the first part of the breathing ckt. For monitoring Oxygen connected in the respiratory gas sent to the Patient. (The concentration is displayed on the screen).
Respiratory Mechanics:	Auto PEEP Dynamic & Static compliance Aspiratory & Expiratory resistance Non-Forced Vital Capacity P0.1
Air Compressor:	High performance dry air compressor with high flow capacity, with oil less motor (thermal cut out) alarm & pressure gauge
Altitude Compensation:	To increase the accuracy of volume measurement, The ventilator includes a correction table for Altitude adjustment.
Battery Backup:	Inbuilt minimum 1 Hr Battery Backup.

8	Pulse Oximeter	4

Pulse Oximeter having provision of LED display of BPM and SPO2, LCD display for alarms, message and bargraph alongwith standard accessories.

10	Infusion pump	2

SPECIFICATION:

Should have

Friction free mechanism

Self explanatory control panel.

Quick change facility during infusion.

Full information about the course of infusion.

Precise and pulse free flow rate.

Alarms 5 minutes before the end of infusion.

Better battery back up 1 Hr

Overall accuracy +/- 2%

Pumping mechanism Lead screw mechanism

Infusion Volume limits	60 ml, Programmable every 0.1 ml
Bolus rate	Upto 500 ml/hr
Occlusion pressure limit	Programmable three level
KVO rate	1% of selected infusion rate but 0.1 ml/hr
Syringe Type	10, 20, 50 , 60 ml of all major brands
Alarms	Runs and mains all critical and non-critical alarms
External power supply	AC Input range 170 – 240 VAC
Power Consumption	12 Watts max.
Battery life	Minimum 20 hrs @ 5 ml/ hr

11	B.P.apparatus table model	15

Maximum error tolerance +/- 3mm Hg
99.99% Pure Mercury
Precision air release valve, wear free with regulation
Micro filter for long life
Cuff with two tube rubber filter
Metal face plate with easy to read scale upto 30 mm Hg
Mercury lock up to secure mercury during storage,
transport or maintenance
Special Seal against mercury contamination
Fold-down cover with spring lock mechanism
Large Storage Compartment for Cuff + Rubber Bulb
Cleaning device for glass tube
1 year warranty
Weight: 1 Kg 465 gms
IS Marked 3390,CM/L-8916802

12	B.P.apparatus stand model	15

Stand Model, stand should be steady and heavy base with wheels
Maximum error tolerance +/- 3mm Hg
99.99% Pure Mercury
Precision air release valve, wear free with regulation
Micro filter for long life
Cuff with two tube rubber filter
Metal face plate with easy to read scale upto 30 mm Hg
Mercury lock up to secure mercury during storage,
transport or maintenance
Special Seal against mercury contamination
Fold-down cover with spring lock mechanism
Large Storage Compartment for Cuff + Rubber Bulb
Cleaning device for glass tube
1 year warranty
Weight: 1 Kg 465 gms
IS Marked 3390,CM/L-8916802

13	Stethoscope	20

- Combined Adult and Pediatric Aluminium anodized finished Chest piece
- Ultra Sensitive Diaphragm for greater amplification.
- Color coordinated Non-Chill bell and Snap On
- Ring to retain diaphragm for patient comfort
- Complete with an accessory case containing
- 2spare diaphragm and one set of ear tips.
- Extra-thick tubing walls minimize extraneous noice
- Includes ID Tag
- Three Year Warranty

CE Marked Product

IV. LABOUR WARD & NEO NATAL EQUIPMENTS FOR NURSERY ONWARDS

1	Baby Incubators	3 (1 for labour room & 2 for neonatal room)

Sr. No.	Technical specifications as per bid document	To give Parameter wise compliance commentary
	BABY INCUBATOR:	
	The unit shall be useful for treating premature an low birth weight babies.	
	The salient features to include maintenance and control of temperature and Humidity in the baby compartment for safe neonatal care.	
	The design to incorporate all controls include micro processor based servo controller for temperature control and to have digital display on the front panel, with dual colour digital display for Skin and Air temperature indication separately.	
	Temperatures setting from 30ºC to 39.9ºC	
	The unit shall be incorporated with all he safety features on any malfunction or emergencies like power failure, High temperature etc.	
	The mechanical features should include clear canopy for visibility with front door opening and four port holes all over for easy handling of the baby in the canopy, flat perplex base without any dents for easy cleaning and disinfection control to be provided with a large mattress platform ,suitable to tilt a desired angle, built in X-ray cassette tray.	

	The unit shall be mounted on a trolley fitted with suitable castors with breaks for the mobility and to have utility drawers for storing the emergency kits, baby needs and accessories	

2	Phototherapy Unit	3

Technical Specifications for Phototherapy (Phototherapy Unit, signal head, high intensity)		
Sl. No.2	DESCRIPTION	To give Parameter wise compliance commentary Offered
1	Heavy sturdy mobile stand photo therapy unit	
2	Antistatic castors, 2 with breaks	
3	Single head surface size, approx: 0.47m x 0.28m	
4	Head height adjustable, approx: 1.18 x 1.65m	
5	Blue light, 4 compact fluorescence Tubes (CFL), approx: 20 W	
6	White light, 2 compact fluorescence Tubes (CFL), approx: 20 W	
7	Tube are to be protected by grill	
8	Irradiance at skin level, up to: 25 µW/cm2/nm	
9	Wavelength : 420 to 500 nm, with highest intensity at 470 nm	
10	Integrated cumulative hour timer	
11	Power requirement: 220V/50 Hz	
12	Power consumption: 150 W	
13	Device is produced by ISO 9001 certified manufacturer (certificate to be submitted, further details see technical provisions)	
14	Device is safety certified according to CE 93/42 or FDA 510K (certificate to be submitted, further details see technical provisions)	
15	Should submit certificate of relevant IEC safety standards	

16	Supplied with:	
a)	2x spare blue CFL tubes	
b)	2x spare white CFL tubes	
c)	1x Spare set of fuses	
d)	User manual with trouble shooting manual in English	
e)	Technical manual with maintenance and first line technical intervention instructions in English	
f)	List of priced accessories	
g)	List of priced spare parts	
h)	List with name and address of technical service providers in India	
i)	Training and installation at end user sites	
j)	Proposal for full services CMC	

.

3	Emergency Resuscitation Kit-Baby	4

SPECIFICATIONS:-

In a carrying case, consisting of:

Resuscitator adult	**CE Marked**	**1 pcs**
Resuscitator chilled	**CE Marked**	**1 pcs**
Mouth to mouth Resuscitator	**CE Marked**	**1 pcs**
Suction Foot Type Small	**CE Marked**	**1 pcs**
L-Scope 4 Blade S.S.	**CE Marked**	**1Set**
L-Scope 2 Blade S.S.	**CE Marked**	**1Set**
Oxygen Hood Round Jointless		**1Set**
E.T.Tube for adult	**GMP certified Mfgr.**	**3 Pcs**
E.T.Tube for Ped	**GMP certified Mfgr.**	**3 Pcs**
Airways plastic (Set of 3 pcs)		**1Set**
Styllets (Set of 3 pcs)		**1 Set**
Face mask Round shape	**Silicone**	**1 Set**
Face mask rubber	**Silicone**	**1 Set**
Mucas Ext.		**2 Pcs**
M-Forceps (Set of 3 pcs)		**1 Set**
M-Brush(Set of 3 pcs)		**1 Set**
Mouth Bite (Set of 3 pcs)		**1 set**

4	Radiant Warmer	3 (1 for labour room & 2 for neonatal room)

Sr. No.	Technical specifications as per bid document	Parameter wise compliance commentary
	Mobile newborn table with adjustable height radiant warmer	
	Antistatic castors,2 with brakes	
	Mattress padding-foam density approximately 25Kg/m³	
	Mattress cover: removable with zipper,waterproof,washable,resistant to cleaning with chlorine based solution and flame retardant	
	Side boards transparent 5 mm acrylic, drop down and lockable with Plastic moulded Columns.	
	Either side swiveling Hood suspended above the table integrates heating element and overhead light.	
	Overhead –Observation light	
	Heating element: Ceramic Heater with parabolic reflector and protected by metal grid.	
	Control unit allows skin/air temperature preset (LED indicator) and drives radiant heater output (Skin, air & manual).Peripheral temperature should also be possible to be monitored & displayed.	
	Temperature range, skin: 34-38ºC (user pre-settable)	
	Heater output in numeric display : 0-100% in increments of 5 %	
	Control unit: audiovisual alarms according to timer and temperature presets avoiding overheating.	
	Displays report systems errors, heater failure, sensor failure on LCD.	
	Unit should have key pad lock facility.	
	Facility to view actual skin temperature in ºC as well as ºF	
	Unit should have RS 232 interface for up gradation for online monitoring	
	Power requirement: 220V/50Hz	
	Power consumption: 800W.	
	Device is produced by ISO 13485:2003 certified manufacturer (Certificate to be submitted)	
	Device is safety certified according to CE 93/42 (Certificate to be submitted. Manufacturer should have supplied CE certified product for a minimum period of one year to submission of this date.)	
	Device ids designed & tested as per IEC	

	Supplied with: **User manual with trouble shooting guidance in English.**	
	Technical manual with maintenance and first line technical intervention instruction, in English.	

5	Room Warmer	2

Room Heater warmer
ISI Marked

8	Delivery Kit	15

SPECIFICATIONS:-

Trolley, dressing carriage size 76C, long x 46 cm wide and 84 cm high.
Ref.IS 4769/1968 1 1Pc.
Towel, trolley 84 cm x 54 cm 2Pc
Gown, operation, cotton 1Pc
Cap. operation, surgeon's 36 x 46 cm 2 2Pc
Gauze absorbent non-sterile 200 mm x 6 m as per IS: 171/1985 2Pc
Tray instrument with cover 450 mm (L) x 300 mm (W) x 80 mm (H) 1 Pc
Macintosh, operation, plastic -2Pc.
Mask, face, surgeon's cap of rear ties: B) Beret type with elastic hem 2pcs ,2 pcs Towel, gloves 3 Pairs
Cotton wool absorbent non-sterilize 500G 2Pc
Drum, sterilizing cylindrical - 275 mm Dia x 132 mm, ss as per IS: 3831/1979 2Pc
Table instrument adjustable type with tray ss 1Pc.

7	Episiotomy kit	10

EPISIOTOMY KIT:

SPECIFICATIONS & Consisting of
Vaccum extractor, Malastrom 1 1
Forceps obstetric, Wrigley's, 280 mm, stainless steel 1
Forceps, obstetric, Barnes-Neville, with traction, 390mm 1
Forceps, sponge holding, straight 228 mm, stainless steel 4
Forceps, artery, Spencer-Wells, straight, 180mm-ss 2
Forceps, artery, Spencer-Wells, straight, 140mm-ss 2
Holder, needle straight, Mayo-Hegar, 175 mm-ss 1
Scissors, ligature, Spencer, 130 mm, stainless steel 1
Scissors, episiotomy, angular, Braun, 145 mm, stainless steel 1
Forceps, tissue, spring-type, 1 x 2 teeth, 160 mm-ss 1
Forceps, tissue, spring-type, serrated ups, 160mm-ss 1
Catheter, urethral, rubber, Foley's 14 ER 1
Catheter, urethral, Nelaton, set of five (Fr 12-20) rubber 1

Forceps, backhaus towel -130 mm-ss 4
Speculum, vaginal, Sim's, double-ended # 3-ss 1
Speculum, vaginal, Hamilton-Bailey 1

8	Forceps Delivery Kit	2

FORCEPS DELIVERY KIT:

SPECIFICATIONS:-

Forceps, obstetric, Neville-Barnes, W/traction 390 mm 1
Hook, decapitation, Braun, 300 mm, stainless steel 1
Hook, crochet, obstetric 300 mm, Smellie, stainless steel 1
Bone, forceps, Mesnard 280 mm, stainless steel 4
Perforator, Smellie, 250 mm, stainless steel 1
Forceps, cranial, Gouss, straight, 295 mm-ss 1
Cranioclast, Braun, stainless steel, 365 mm long 1
Scissors ligature Spencer 130 mm, stainless steel 1
Forceps sponge holding, 22.5 cm straight – ss 1
Forceps, tissue, spring-type, 1 x 2 teeth, 160 mm, stainless steel 1
Forceps, tissue, spring-type, serrated tips, 160 mm-ss 1
Forceps, artery, Spencer–Wells, straight, 180 mm-ss 2
Forceps, artery, Spencer-Wells, straight, 140 mm-ss 2
Forceps, scalp flap, Willet's 190 mm –ss 4
Forceps, Vulsellum, duplay double curved, 280 mm-ss 4
Forceps, Vulsellum, duplay double curved, 240 mm-ss 1
Catheter, urethral, 14 Fr. solid tip, one eye, soft rubber 3
47
Holder, needle, Mayo-Hegar, narrow jaw, straight, 175 mm-ss 1
Speculum vaginal bi-valve, Cusco-medium, stainless steel 1
Speculum, vaginal sim's double-ended, size # 3-ss 1
Forceps, backhaus towel, 130 mm, stainless steel 4

9	Pulse Oximeter baby & adult	2 each

SPECIFICATIONS: -
Suitable for continuous monitoring, Audio & Visual alarms
Memory for Previous alarm setting-
Bright LED display.
Alarms: High SpO2 -51 to 100%
Low SpO2 -50 to 99%
High Pulse – 31 to 230 BPM
Low Pulse - 30 to 229 BPM
Display: Two 3 Digit, 7 Segment LED
Accuracy:SpO2 +/- 2%, Pulse +/- 2%
Range: SpO2 – 0-100%
Pulse – 32 to 250BPM

Battery: Rechargeable NiCd battery
12 hours of continuous operation.

10	Cardiac monitor baby	2

Specifications:

It should be Slim design with a thickness of about 7 cms & Light Weight (< 2.5 Kgs inclusive of battery and charger)

Monitored Parameters – 3 and 5 Lead ECG, SpO2, NIBP, Resp, Temp (2 Ports), IBP (2 Ports) and EtCO2 (Microstream Applications)

Display – 10.1 inch minimum, Wide Screen, Color thin film transitive (TFT) liquid crystal display (LCD) with resistive touch screen

Waveforms – Upto Five
Capability to change Waveform Color
Capability to view bigger Font of the displayed parameters
120 hours of Graphical & Tabular Trends of the monitored parameters
Battery back of upto 5 hours
Monitor should be able to viewed and readable from a wide angle and from an appropriate distance
Monitor should have capability for network connectivity to its Central
Modular Recorder Unit (Thermal) with 2 channel recording
Monitor should avoid using an "Internal Fan" and should have good mechanism to dissipate heat with ease in maintenance
Monitor should have capability for a easy software upgrade preferably using an USB Memory Stick
Monitor should simplify user interaction by offering Single Level Menu applications
Monitor should have capability to offer Integrated demo mode
Monitor should not have an external charger outside and should offer charging capability by using a standard 3 – pin power cord
Standard Accessories: 3 Lead or 5 Lead ECG Cable, Adult or Pediatric Cuff, Adult SPO2 Probe, Rectal or Skin Temp Probe & Wall or Table Mount with or without bed hook
Should be able to offer the monitor base in either White or Black color
Should be able to operate in AC mains range of 100 V – 240 V
Monitor should be able to operate with lesser power consumption (about 30 W internal power supply)
Monitor should be capable to be mounted on a Wall Mount / Table Mount / Roll Stand with or without a Bed Hook
Monitor should be able to display multiple ECG leads waveforms simultaneously with both 3 and 5 Lead ECG Cable
Monitor should be US-FDA & CE approved

11	Nebulizer baby	4 (for ICU & wards)

Light weight, Powerful, Durable, Safe & User friendly
SPECIFICATIONS:-

Nebulizer Nebulization Rate……3cc H20/8-11 minutes.

Maximum Compressor Pressure…25 psig by relief valve setting.
Maximum Operating Pressure…….. 11-15 psig
Free Air Flow…… 10 lpm

Compressor Type…….. Piston

Electrical Requirements…… 230V , 50 Hz-0.7 amps

Power Consumption…… 70 walts

Weight…… 1.3 kgs

In built thermal fuse for optimum safety

12	Weighing machine adult	6

SPECIFICATIONS:-
Size: 30 x 23.5 x 5.5 cm
Capacity: 125 x 0.5 kg
Weight: 2.2 Kg
Smartly Styled Scale with unique sunken lens
Latest Comfortable 'Feet Positioning ' Design with Centre Parting Height Weight Chart

13	Weighing machine infant	4

WEIGHING MACHINE INFANT & CHILDREN:-

V. EAR NOSE THROAT EQUIPMENT

1	Audiometer	1

2	Operating Microscope (ENT)	1

3	Head light (ordinary) (Boyle Davis)	2

4	ENT Operation set including headlight, Tonsils	1

5	Mastoid Set	1

6	Micro Ear Set myringoplasty	1

7	Stapedotomy Set	1

8	Stapeidoplasty	1

9	ENT Nasal Set (SMR, Septoplasty, Polypetcomy, DNS, Rhinoplasty)	1

10	Laryngoscope fibreoptic ENT	1

Should have Hook – on Handle used with
conventional fibreoptic 4 blades
which can be used with Fibrelite Blades also.
Should have no trauma causing hot bulb
Should have no possibility of loose bulb entering oral airway
Should have cool high power light
Should have no electrical wires in the blade
Should have no electrical switches
Full Stainless Steel construction
No Flickering
Minimum 3000 fibres should be bundled together to ensure steady, bright & focused beam

11	Laryngoscope indirect	2

12	Otoscope	2

13	Head Light (cold light)	1

14	Tracheostomy Set	2

15	Tuning fork	1

VI. EYE EQUIPMENTS

1	Cryo Surgery Unit	1
2	Opthalmoscope - Direct	2
3	Slit Lamp	1
4	Retino scope	1
5	Perimeter	1
6	IOL Operation set	2

VII. DENTAL EQUIPMENTS

2	Dental Unit with motor for dental OP	1

Same with Sl.3

3	Dental Chair	1

DENTAL CHAIR WITH UNIT:

SPECIFICATIONS:-

Chair raising and lowering and back rest-upright to flat.

PU. moulded handle for long life

Chair Mount Unit fitted with:

a) Operating light having Multi Surface Glass Reflector with two intensities. 15,000 to 25,000 Lux at one Meter distance.

b) Basin attachment should be fabricated out of non rusting Aluminum Metal or plastic with painting. Top of the basin spittoon should be original porcelain, single piece white color, smooth curvature for sparkless cleaning

High & Low Vacuum Motorized suction with flow control valve

c) STAINLESS STEEL INSTRUMENT TRAY for keeping instruments.

d) X-RAY VIEWER

Modular fitted with:

A) AIROTOR POINTS

Airotor unit with Control box fitted with transparent Regulated water tank, foot control. Supplied with:
Air Rotor Hand piece Torque type-Autoclavable 1 No.

B) MICROMOTOR

Micro motor having an excellent fan perfect cooling 35000 RPM, high quality motor totally guaranteed, supplied with extra set of Carbon Brush.

i) Contrangle Hand piece -Autoclavable 1 No
ii) Straight Hand piece - Autoclavable 1 No

C) 3-Way Syringes 2 Nos

AIROTOR AIR COMPRESSOR:

Oil-free, Medical Grade Mono-bloc 0.75 HP Compressor.

The Compressor Should be fitted with :

- Built-in Thermo cut-off to save the motor during excess heat.
- Auto head Air Release Valve.
- Automatic Cut-off.
- Safety Release Valve.
- Drain Valve.
- Pressure Gauge.
- The Inner surface of the Compressor Tank is coated with Epoxy to prevent rusting.

DENTAL OPERATOR'S STOOL: Dental Operator's Stool should be moving on 5 castors, well balanced, freely movable. The seat and back-rest should be Euro moulded. Height Adjustment by pneumatic piston.

3	Dental Kit	4

DENTAL KIT:

SPECIFICATIONS:-

VIII. OPERATION THEATRE EQUIPMENTS

1	Auto Clave HP Horizontal	1

SPECIFICATIONS:-

Inner Chamber Size 400 x 600mm

Inner Chamber made up of thick s.steel of 304 / 316 quality and jacket is made out of rolled s.steel. Single door made of rolled steel lined with S.S. sheet has radial locking system. All units hydraulically tested upto 40 psi. The space between outer cover made of thick rolled steel sheet and the steam jacket filled with mineral wool. Boiler made of thick S.S.sheet and is located under the sterilizer. It should be fitted with water level indicator, safety valve, pressure gauge, and water inlet and drain valves. Unit to be fitted with low-water cut-off device and automatic pressure control device. Fitted with self locking safety door device. . Two separate valves should be provided for evacuating steam from inner chamber and jacket, as and when desired. The sterilization cycle should be controlled through multiport valve or threeway valve. Fitted with a dial thermometer and automatic vacuum breaker. To work on 440 volts, 3 phase, A.C. supply.

4	Operation Table Hydraulic Major	4

SPECIFICATIONS:-

Should Be Most Latest, convenient Electro-Hydraulic O.T.Table.
for General Surgery and certain special procedures.

- Should Be Fully manouverable by Finger tip operted
- Touch Keys on a Remote Control Hand Switch.
- Sensor controlled leveling for lateral and trendelenberg positions.
- Movement controllable by high pressure Electro-Hydraulic System to achieve smooth and efficient operation, without the slightest jerk at start/end.
- Manifold have Flow Control Valves for adjusting the desired speed of the table movement to high accuracy.
- Hydraulic Motor Pump fitted with Anti-Vibration mountings

and Auto Thermal Cut-off.
- Remote Control Hand Unit operatable on 12 Volts DC.
- identifiable symbols on switches to provide correct selection of Table Positions at any stage of operation.
- Full length Cassette Tunnel to move X-Ray cassette.
- Special quick-change clamp to hold cassette firmly an any position.
- Radio Traslucent top.
- Durable and Hygienic Base Cover made of Stainless Steel.

DIMENSIONS :

Length : 2150 mm
Width : 510 mm

ELECTRO-HYDRAULIC MOVEMENTS :

I) Raising & lowering

a) Minimum height : 715mm
b) Maximum Height : 1050mm

II) Lateral Tilt : Left & right tilting by 28 deg. C.

III) Trendelenburg and Reverse Trendelenburg by 30 deg.C.

IV) Back Rest Section : 80 deg.upright to 30 deg. down

V) Leg Section : Completely flat to right angle.

OTHER adjustments :
- Head Section - moved mechanically, detachable Head Rest;
- Table mounted on Castor wheels.
- Its movements in the Operation Theatre is smooth.
- Brake for firm and rigid locking of table;
- When the Brake is released the table to move on its castors.
- Memberane type, feather touch, hand control,
- to adjust all Electro-Hydraulic movements.
- Shock Free, Operating on DC 12V with a flexible cable.

To be supplied with Voltage Stabilizer and Fixed water Proof foam Mattress & All Std Accessories. Other Accessories suitable for Other Surgical Operation Should Quoted.

5	Operation table Hydraulic Minor	4

SPECIFICATIONS:-

Five Section Stainless steel top S.S. covered base with auto-locking Device, concealed hydraulic cylinder complete with all standard Accessories including water proof mattress.

6	Operating table non-hydraulic field type	2

SPECIFICATIONS:-

Size 72" X 27" X 30" frame made of heavy tubular steel with Strong mechanism for height adjustment. Stainless steel top in Sections. Detachable leg side complete with anesthetist screen

Lithotomic rods with straps & arm rest.

7	Operating table Orthopedic *	1

SPECIFICATIONS:-

Made of All Stainless steel with all kinds of accessories,
Radio- Trans Lucent Top.

10	Shadowless lamp ceiling type major*	2

SPECIFICATIONS:-

Dome Size: With Seven Glass Dichoric Reflectors	70 cm
Dome Size: Four Glass Dichoric Reflectors	50 cm
Intensity	1,20,000 Lux
Colour Temperature	4300 + 10% K
Heat rise from ambient temperature	$2^{O}C$-$4^{O}C$
Field Diameter	15-20 cm
Input	220V AC, 50/60 Hz.

11	Shadowless lamp ceiling type minor*	1

SPECIFICATIONS:-

SPECIFICATION :	**DOME**
Dome Head	: 500 MM
intensity at 1 m	: 1,20,000 lux approx.
Colour Temperature	: 4.250 $\pm$ 300 K
Halogen Lamp	: 4 nos. 12V-50W

Height Adjustments		: 500 mm
Possible Movements	:	: Angular,Radial, Axial.
Variable Intensity	:	: 3 stages
Input Supply	:	: 220VAC±10%;50HZ±2%

12	Shadowless Lamp stand model	3

SPECIFICATIONS:-

Mobile light

- 19" Dome Dia
- Imported halogen bulb 24V – 150W
- Concealed heavy duty step down transformer.
- Heat absorbing & colour correcting special filter glass.
- Silver coated Teflon wring.
- Feathers touch movement.
- Sterilizable central handle.
- Superior paint with attractive design.
- Provided with stand by bulb

13	Focus lamp Ordinary	4

SPECIFICATIONS:-

- Mirror finished metallised dome of 45cms dia.
- Well counter balanced & easy vertical height adjustment.
- Angulations and lateral titling of dome maneovred by a control knob.
- The light is fitted with a special halogen bulb 24-150 W with low voltage transformer working On 220V-AC.
    - The light is mounted on a heavy base with four castors
- For smooth movement.

14	Sterilizer big (Instrument)	3

SPECIFICATIONS:-

–Should be IS : 5022–1989

Made of Seamless S.S. Sheet of grade-304 (18 Cr-8 Ni).

Suitable for 220V, 50 Hz, Single Phase, AC Supply.

L	×	W	×	H	Power
510	×	200	×	150 mm	2.00 KW

15	Sterilizer Medium (Instrument)	5

SPECIFICATIONS:-

–Should be IS : 5022–1989

Made of Seamless S.S. Sheet of grade-304 (18 Cr-8 Ni).

Suitable for 220V, 50 Hz, Single Phase, AC Supply.

L	×	W	×	H	Power
430	×	200	×	150 mm	1.50 KW

16	Steriliser Small (Instruments)	5

SPECIFICATIONS:-

–Should be IS : 5022–1989

Made of Seamless S.S. Sheet of grade-304 (18 Cr-8 Ni).

Suitable for 220V, 50 Hz, Single Phase, AC Supply.

L	×	W	×	H	Power
300	×	150	×	125 mm	1.00 KW

17	Bowl Steriliser - big*	3

SPECIFICATIONS:-

To be Used in CSSD & Clinics to disinfect instruments.
Made of SS : 304 with hydraulic lid which closes the sterilizer smoothly. Lid should be able to be lifted proportionally with paddle type device. Thermostatically controlled.
Supplied with the instrument tray and a hanger system to dip
the instrument fully inside water.

Size	**Electric Load**
600 X 600 X 500 mm	6.0 KW

18	Bowl steriliser - Medium*	1

SPECIFICATIONS:-

To be Used in CSSD & Clinics to disinfect instruments.
Made of SS : 304 with hydraulic lid which closes the sterilizer smoothly. Lid should be able to be lifted proportionally with paddle type device.Thermostatically controlled.
Supplied with the instrument tray and a hanger system to dip the instrument fully inside water.

Size	**Electric Load**
600 X 400 X 300 mm	4.5 KW

19	Diathermy Machine (Electric Cautery)	1

Modular design, Integrated Patient Control System (PCS).
Independent activation of monopolar and bipolar output.
Should have time controlled cutting mode
Should allow monopolar cutting and coagulation by using both foot switching.
Should have bipolar coagulation option.
The system should automatically adjust to given tissue impedances.
Monopolar **Pure cut** should be suitable for under water cutting (TURP, TUVP & TCRE) with URO-CUT, which eliminates lag time in initiating cut especially suited for urological procedure.

a) Three Blend – modes (program)

b) Low Cut – Endocut (Gastrocut) –
for G.I Surgery

Should have Monopolar coagulation –Soft mode (lap, desiccation) Forced mode (Standard), Spray mode (for non contact large area).
a)Desiccation/Soft – for low voltage soft coagulation suitable for laproscopic & delicate tissue work.

b)Fulgurate/Forced – non contact coagulation for minimal smoke generation

c)Spray for non-contact large tissue area coagulation with minimum depth of necrosis

Should have Bipolar- Micro (for delicate tissue without charring, adhesion and blanching), Coagulation (high current low voltage pulsed bipolar, also suitable for vessel sealing system

Range of accessories should provide extensive selection of handles for various application e.g. needle, ball, spatula type.

Accessories-
Ergonomically designed trolley to house cautery (Small,. Light and Portable), Monopolar cord (at least 6), bipolar cord (at least 6) selection of handles, footswitches (all other standard accessories).

Input operating range 180-260 V/AC 50HZ/5 amp. With fuse.

20	Suction Apparatus - Electrical	5

SPECIFICATIONS:-

Suction machine foot cum electric model with 2 separate suction systems, electric & cabinet made of mild steel epoxy powder coated,with 2 vaccum gauges 700 mm/Hg
Volume: 25-30 Ltrs/min
(Jar Capacity 3 Ltrs)
,2 graduated polycarbonate suction jars each of 1.5 ltrs capacity self sealing rubber lids with synthetic rubber lids,long pressure tubing, heavy vertical foot pump, vacuum control , automatic overflow cut off device,mounted on 4 rubber castors.
Sound: 45 db A± 3
ISI Marked No. IS:4533, SS Top, Epoxy Powder Coated Finish

21	Suction Apparatus - Foot operated	4

SPECIFICATIONS:-

Foot operated suction machine with vertical heavy pump with one graduated glass suction jar of 1.6 ltr capacity with synthetic rubber lid, long pressure tubing, mounted On heavy base epoxy powder coated.

22	Dehumidifier*	1

SPECIFICATIONS:-

De-Humidifier should be compact portable unit controlling humidity
upto 30% with an accuracy of +3%. & 1.5 tonne capacity to cover
approx 150 sq. ft. of floor area.
with castors for easy mobility
and built in water tank for water collection.

Suitable to work on 220 V, single phase, 50 Hz, Ac supply.
Capacity :
a)1.5 Ton .....

IX. LABORATORY EQUIPMENTS

1	Binocular Microscope	6

SPECIFICATIONS:-

Binocular Compound Microscope with Infinity Optical System (IOS)

Illumination

Koehler Illumination system with Built-in 6V-20W Halogen with intensity control regulator.

Focusing Module

COAXIAL coarse & fine focusing mechanism, with tension control ring. **Ergonomically designed for easy grip**, esp. for tension control.

Nosepiece

Inward Tilt Low friction & fully Parfocal **Quadruple** Revolving nosepiece (Ball bearing type).

Viewing Head

Siedentopf Binocular tube, inclined at **30**° rotatable through **360**° with **IPD 48-75 mm** and Dioptric adjustment. Anti fungus treated

Stage

Double layer graduated mechanical rectangular stage **size 142 x 133mm** cross travel 75 (X) x 50 (Y) mm on ball bearing co-axial controls spring clip **double specimen holder Condenser**

Moveable ABBE Condenser, NA 1.25 with aspheric lens. **Iris diaphragm** special day light **blue filter** in holder

Objectives

IP series DIN Infinity Plan Achromatic, Anti fungus treated objectives:

4x/0.10
10x/0.25
20x/0.40
40x(SL)/0.65
100x(SL, Oil)/1.25

Eyepieces

Wide Field eyepiece **WF 10x/18mm** paired with eye guards

Power Input **220V AC, 50Hz** as per ISO 9001, CE standards.

Standard Accessories

Packed in Moulded Styrofoam box with:
Operation Manual,Cleaning Cloth
Dust cover

4	Electric Calorimeter	2

SPECIFICATIONS:-

with all STD. Accessories.

\

6	Semi auto analyser	1

SPECIFICATIONS:-

LIGHT SOURCE:	Quartz-halogen lamp 12V-20W
WAVELENGTH RANGE:	Automatic by 12 position filter wheel, 6 standard interference **Filters; 340,405,505, 546,578 & 620 nm,** 6 positions for optional Filters.
PHOTOMETRIC RANGE:	-0.1 to 2.3 Absorbance.
DETECTOR:	**Photo Diode (320 – 1000 nm)**
BLANKING:	Automatic zero setting.
OPERATOR INTERFACE:	Membrane keyboard for direct function and alpha-numeric entry, Optional external keyboard, High contrast graphical LCD display.Real time clock, 24 hours system.
LANGUAGES:	English.
MEASUREMENT PROCEDURES:	Kinetic with linearity check, Kinetic with linearity check, Sample slope blank, two point kinetic with or without Reagent blank, End point with or without reagent blank, Bichromatic end point with or without reagent blank, End point with sample blank & with or without reagent Blank.
MULTIPLE TESTING:	**Up to 9 replicates, Means, SD and CV.**
MEASURING TIME:	Programmable, 2 to 999 seconds for kinetic & two point type of tests, For end point fixed at 2 seconds.
DELAY TIME:	Programmable, 0 to 999 seconds.
METHOD PARAMETER SETTINGS:	Method name, Measurement mode, Wavelength 1 & 2 Aspiration volume, Measurement delay, Measurement Time, Factor, Concentration standards, Reagent blanky/n Sample blank y/n, Units of results, Levels for flagging, Curve fit y/n, Linearity check.
CALIBRATION:	Factor, one point, two point, multi point. Automatic on 1 standard (linear Mode), Automatic on up to 10 standards

(non linear mode).

QUALITY CONTROL: Two controls per test, **QC survey for ast 30 control measurements**, **Levey Jennings plot, High/Low flags.**

KINETIC MEASURING TIME: **Programmable, lowest 30 seconds.**

FLOWCELL: **Metal with quartz windows, measuring volume 25 ul.**

TEMPARATURE CONTROL: By means of Peltier elements, fixed temperature at 37 degree C

ASPIRATION SYSTEM: **Internal pump of bellows type**, driven by stepper motor, back panel Connection for waste, aspiration volume programmable.

PRINTER: Matrix printer (optional), Normal paper, external printer port available.

SIGNAL INTERFACE: **Centronics type parallel port, RS 232 type serial port, PS 2 type Port for external keyboard.**

QUALITY: UL; CE; CB certificate.

POWER REQUIREMENTS: 100 – 240 VAC nominal, 50/60Hz. Battery back-up to retain data.

7	Micro pipettes **of different volumes**	10

Specifications:

Manual type working on sypham system wholly. Wholly of SS body size 60 cms x 15 cms Dia.

Electronically operated 230 V AC 50 HZ.

8	Water bath	2

SPECIFICATIONS:-

With electronic control , LED Display, Button to set nominal value in 0.1℃. Temperature Range 5°C above ambient room temperature to 100 ℃,

External W X D X H (approx)
500 x 250 x 300 mm
Bath Capacity: 20 Ltrs (Approx)
Temperature Accuracy: ± 0.1 ºC
Body of the equipment should be of material
which is rust free from both inside and outside

9	Hot Air oven*	3

SPECIFICATIONS:-

Size: 45 x 45 x 45 cm
Door/Shelf: Single Door with 2 shelves constructed
To give uniform and adequate sterilizing temperature
Range adjustable up to 200 ºC with digital temperature
Display, stainless steel and rust free.
Material: Door fitted on heavy brass chrome plated hinges
Cabinet: Cabinet double walled mild steel
Insulation: Minimum Thickness 5 cm of glass wool
Finish: Inside the cabinet heat resistant finish and
Outside durable, rust free
Air Circulation: Ventilated with internal fans to assist
Circulation of air
Thermometer: An accurate thermometer covering upto 200 ºC
With digital display
Thermostat: An indicator lamp should be provided to indicate
Thermostat function
The apparatus should confirm to IS 6365-1971 (Reaffirmed 1995)
With latest amendments in Indian Standards Specification for
Laboratory Electric Ovens or equivalent international standard
Covering markings test and satisfy requirements.

10	Lab Incubator*	3

SPECIFICATIONS:-

ISI mark : IS – 3118
Incubator Bacteriological (Memmert type) reliable day to
day operation in variety of uses. Drying of slides, paraffin
embedding, tissue culture work, incubation of antibody test,
excellent for Microbiological determinations, crystallization
studies and Incubation of hydroxy steroids.
Construction :–
with double walled construction with complete inner chamber

made of Anodized Aluminium or Highly Polished Stainless Steel.
Outer chamber is made of Mild Steel Sheet, finished with powder coated paint. 75 mm gap between the walls is filled with special grade glass wool for proper insulation and to avoid heat losses.
Inner chamber fabricated with ribs for adjusting shelves to convenient height.
Supplied with 2 or 3 removable shelves. SHELVES made of fully Anodized Aluminium Sheet or Polished Stainless Steel Sheet as per chamber.
Door insulated & fitted with heavy hinges. Door Double glass window which facilitate inspection of samples without opening the door. Heating elements, made of high grade imported nichrome wire are put inside the porcelain beads and placed at the bottom and side ribs for uniform temperature all over the space.

Temperature Control :–

by imported capillary type thermostat from ambient to 80°C.
Temperature control knob graduated in centigrade degrees after actually observing the temperature in steady state. fitted an L-shaped prismatic glass
Thermometer on top of the Incubator
for reading the chamber temperature.

WithVentilation :–

Control Panel having a thermostat control knob, ON/OFF switch and two pilot lamps.

Power Requirement :–

Supplied with cord and plug suitable to operate on 220 V single phase, 50 Hz, AC supply.

Size of inner chamber :–

Inner Chamber W x H x DS.S. (304 grade)

455 x 605 x 455 mm

Filled with Air Circulation Fan

Optional Accessories & spares to be quoted

11	Distilled water Plant	2

SPECIFICATIONS:-

Steri free standing electrically operated water still capable of producing Pyrogen free distilled water as per IP/BP standards. All contact parts are made of stainless steel,having immersion water heater, low water protection & electrical control box. Mounted on a sturdy MS tubular stand. **Made of SS 304**

Capacity :–

a) 25 Lit/ hr.

12	Electricentrifuge, **table top**	3

The centrifuges designed for
high speed centrifuging applications. The
equipment is to be provided with speed control,
digital temperature control cum indicator,
digital timer with a range of 0-99 minutes
and alarm at automatic switching off,
dynamic brake, zero start interlock, safety
cut off in case of imbalance and lid locking
switch etc
General Purpose Laboratory Centrifuge
Max. Speed RPM20000
Max. RCF x g34500
Max. Tube Size100 ml
Max. Capacity 400 ml

13	Cell Counter Electronic*	1

SPECIFICATIONS:-

Designed for easy handling, eliminating calculation while counting different blood cells. *Differential Blood Cell Counter* should incorporate the latest *Micro Processor* based technology to pack the features of differential counting and percentage calculating in a single instrument to ease the blood cell counting procedures. Should consists of 7 segment LED displays, touch key pads.
3 nos control keys, i.e. for Total, Percentage & Clear & 12 nos
Differential Counting Keys. Beep sound for each key depression to confirm entry in the respective memory unit. Fibre glass cabinet in desk top model shape. Percentage of each cell count should be possible at any stage. Should be supplied complete with cord and plug.
Suitable to work on 220 V, single phase, 50 Hz, AC supply.

19	Glucometer	1

SPECIFICATIONS:-

STORAGE CONDITIONS	**Temperature : -10 ° to +50° C (14° to 122° F)** **Humidity :RH≤ 80%**
MEMORY CAPACITY	**180 test results with respective dates and times**
MEASUREMENT UNIT	**Either S.I unit (mmol/L) or mg/dL**

DISPLAY	**LCD display**
REACTION TIME	**9 Seconds**
METER DIMENSIONS	**58 X 80 X 19 mm**
METER WEIGHT	**50 g (with battery)**
MEASURING RANGE	**1.7 to 41.7 mmol/l (30 to 750 mg/dL)**
POWER SUPPLY	**One 3 V Lithium Battery (CR 2032)**
BATTERY LIFETIME	**Over 1000 Tests**
EXTERNAL OUTPUT (OPTIONAL RS 232 CABLE IS SOLD SEPARATELY)	**RS 232 PC interface**
STRIP SIZE	**38 X 10 X 0.6 mm**
STORAGE CONDITIONS	**Temperature : 2 ° to 30° C (36° to 86° F) Humidity :RH≤ 80%**
BLOOD VOLUME	**3µL**
TEST STRIPS	**Using the GLUCO CHEK Blood Glucose Test Strips Only**
OPERATIONS CONDITIONS	**Temperature : 10 ° to 40° C (50° to 104° F) Humidity :RH :20% to 80%**
SAMPLE TYPE	**Capillary Whole Blood**
HCT OF TESTED BLOOD	**30 % to 55%**
EXPIRY OF TEST STRIPS	**18 months from production**
CODING	**Automatic by Code Card insertion**

20	Haemoglobinometer	2

- Fast & precise measure of Hemoglobin and Hematocrit in whole blood.
- Should have an option of Hematocrit value in case of normal Hb limit
- Measurement at two wavelengths, 570 nm & 880nm
- The machine should have an option of setting the cut off range of flag the extremely higher and lower values.
- Should have user friendly Graphical Touch Screen Panel.

- Analyser automatically stores up to 100 results with date, time and sex
- Automatic self test
- Measuring range 0-256 g/L (0-25.6 g/dl,0-15.9 mmol/L)
- Measuring time- Less than 60 secs
- Analyser should have in-built re chargeable battery with 100 hrs back up.
- Quality control Curvettes to be provided for QA.
- PC and printer connectivity option
- Calibrated against the international reference method for hemoglobin determination.
- Should be US FDA approved CLIA waived.

21	TCDC count apparatus	1
22	ESR stand with tubes	4
23	Test tube stands *	6
24	Test tube rack *	6
25	Test tube holders*	6
26	Spirit lamp*	8
27	Rotatry Microtome*	1

SPECIFICATIONS:-

Serial sectioning……with feed setting visible from front, locking device and counter balanced wheel.
Feed adjustable……. from 1 to 50 microns in steps of 1 micron.
movement Free up and down of object clamp.
Automatic restricted total excursion of 28 mm by disengaging the feed mechanism to prevent jamming.
Flexible orientation of object piece Ball and flange object clamp.

Specimen Capacity upto 32×27 mm on stem of block holders.
Knife holder …… 120 mm on 180 mm long knife.
Cutting angle 30 degrees.
Knife holder Two levers release for resetting angles and a third lever to be able to release the entire assembly for movement on slide way to adjust horizontal distance from object.
With cam system to eliminate the conventional cord system for feeding, resulting in better section cutting and improved efficiency of the machine.
Supplied complete with One knife 120 mm long with back and handle in wooden box, 2 block holders, One bottle of lubrication oil, rexin cover complete in all respects.

17(B) ROTARY MICROTOME
—Lipshaw Type
Sectioning ------- adjustable block holder.
Allowing technicians---------- to alter the block angle for poorly embedded tissue.
Wheel…… counter balancing
Feed ……automatic mechanism and feed release.
Sectioning ……serial Uniform adjustable from 1 to 50 microns in step of 1 micron.
Feed mechanism ……independent of other movements.

Supplied complete with one knife, having back and handle in wooden box, 6 block holders, One bottle of lubricating oil and rexine cover.

28	Wax Embel Bath*	

SPECIFICATIONS:-

Modular unit. Suitable for histopathology and combination of paraffin wax tank, tissue bath and cool plate. Programmable preheating with timer, temperature controlled work surface upto max 80^0, cooled area with in work surface, auto settings of temp. 50^0 less than work surface, bath size : 300 x 250 mm, suitable to operate on 220-230 V, single phase 50 Hz.

Bath capacity : 5 Ltrs. (mins.)

30	Timer stop watch	2

31	Alarm clock	1

32	Elisa Reader cum washer	1

SPECIFICATIONS: -

1. Semi-automated system with 8 measurement channels & 1 light channel & 1 light beam reference channel

2. Password protection facility, auto calibration, self diagnosis and compatible to V U and Flat bottom wells

3. The instrument should be supplied with Windows Based Software and RS 232 connectivity

4. Upgradeable to inbuilt incubation facility with Temperature control : 25-45 degree Celsius. 0.1 degree Celsius step, accuracy: +/- 5 degree Celsius, at 37 degree, well to well uniformity: +/- 0.7 degree Celsius ,warm up time: <5 min

5. Memory to store up to 30 test of plate data

6. Calibration with point to point curve fit or Regression

7. Linearity :+/- 1.0% from 0.000 to 2.000 OD, +/- 2.0% from 2.000 to 3.000 OD
Accuracy : +/- 1.0% or 0.010 from 0.000 to 3.000 OD at 490 nm
Precision : 1.0% or 0.005 OD from 0.000 to 2.000 OD,
1.5% from 2.000 to 3.000 OD

8. Reader is capable of producing different types of Reports like Raw, Absorbance, matrix, limit, cutoff, concentration, curve fit, difference and kinetic.

9. Interference filters , Bandwidth: 10nm, Standard Filters: 415, 450, 490 and 655nm
(Optional filters: 405, 540, 550, 570, 595, 630 and 750nm)

10. Filters narrow band interference type range 405-750nm

11. Inbuilt shaking facility is available, 3-speed setting, programmable time 0-999 second

12. Possibility for bichromatic measurements

13. Programmable with capacity to store user defined programming at user's end possible for up to 30 test

14. Blank mode setting possible for turbid samples & analytes

15. Built in printer or printer with parallel interface along with Serial Port

16. Electrical data : 100-240 VAC, 50/60 Hz, Power consumption 100VA maximum

17. Both single & dual wavelength reading

18. Calculation mode of single point or multi point calibration.

19. Measure range 0-3.5 OD

33	Blood gas analyser*	1

34	Electrolyte Analyser	1

35	Glycosylated Haemoglobinometer	1

36	Blood Bank Refrigerator	3

These are the primary requirements of every blood bank and hospital, to preserve and secure the vital supply of blood, plasma and other blood derivatives Mounted on a study angle frame the inner chamber is made up of S.S. and outer of M.S. duly enamel painted. The temperature is maintained with 4 C to 6 C for storing blood bottles or blood bags. Temp. Is controlled by Solid State Digital Indicator-cum-controller and triggers the Audio Visual Alarm in the event of fluctuation exceeding permitted tolerance. Unit is also fitted with door operated alarm and power supply failure alarm, as a safety device. Drawers are provided for 110 bags.

38	Blood Collection Monitor	1

39	Laboratory Autoclaves	3

It is used for sterilization under saturated steam pressure at any selected point between 5 to 20 p.s.i. (adjustable). These are double walled units with inner chamber (Boiler) made of 18 S.W.G. stainless steel and outer chamber is made of SS sheet covered with S.S. Lid with radial locking system. Fitted with neoprene rubber gasket, all systems

are hydraulically tested up to 40 p.s.i. as a safety measure. All autoclaves are fitted with standard accessories such as water level indicator, pressure gauge, steam release cock, spring-loaded safety valve and heating element. Supplied complete with S.S. basket and vacuum breaker device, cord and plug, to work on 220/230 volts A.C. Supply.Capacity: 22, 40, 50, 78, 98, 187 ltr We reserve the right to change photos & specifications without any prior notice.

41	Ordinary Refrigerator	3

42	Floatation Bath	1

49	RO Plant

RO 100 Litre Per Hour:-
SPECIFICATIONS:

1. Average permeates/hour	:	100
2. Average recovery	:	40%
3. Membrane	:	02 Nos
4. TDS level indicator	:	01 Nos
5. Pressure gauge	:	01 Nos
6. Average TDS removal	:	90%
7. High Pressure pump	:	01 Nos
8. Skid	:	01 Nos
9. LP/HP switch	:	01 no. each
10. Control Module	:	01 no.
11. Sediment filter cartridge	:	20” X 1
12. Activated carbon black	:	20” X 1
13. Max permissible TDS in feed (ppm)	:	1500
14. UV filter	:	01 nos

RO 150 LPH:-

SPECIFICATION:

1. Average permeates/hour	:	150
2. Average recovery	:	35%
3. Membrane	:	02 Nos
4. TDS level indicator	:	01 No.
5. Pressure gauge	:	01 No.
6. Average TDS removal	:	90%-95%
7. High pressure pump	:	01 Nos
8. Skid	:	01 No.
9. LP/HP switch	:	01 No. each
10. Control Module	:	01 No.
11. Sediment filter cartridge	:	20” X 1
12. Activated carbon block	:	20” X 1

13. Max permissible TDS in feed (ppm) : 1500
14. UV filter : 01

50	Computer with UPS and Printer	1

Specification:
Processor: Intel Core2 Duo Processor E4600 (2.4 GHz, 2 MB L2 Cache, 800 MHz FSB
Chipset: Intel G33 Chipset
Bus Architecture: Integrated Graphics 2 PCI, 1 PCI Express x1, 1 PCI Express x16
Memory: 2 GB 667 MHz DDR2 RAM with 4GB expandability
Hard Disk Drive: 160 GB 7200 rpm Serial ATA HDD
Monitor: 17" TFT Monitor
Keyboard: 104 keys keyboards
Mouse: Optical Mouse / Bays: 4 nos
Ports: 6 USB ports (including 2 USB in front)/ 1 serial port/ 1 parallel port/ 1 PS/ 2 key Board and 1 PS/2 mouse port
Cabinet: Mini Tower
Network Features: 10/100/1000 on board integrated network port with remote booting facility
Operating System: Windows Vista Business preloaded with media
(Item No : 3 DGS&D Rate Contract)
Optical Drive: DVD Writer

a. LaserJet Printer
   Make/ Model: HP M1319f (Print, Scan, Copy, Fax)
b. Line Interactive 600 VA Numeric UPS
c. Microsoft Office 2007 Std. MOLP with media

X. SURGICAL EQUIPMENT SETS

1	P.S.set	2

2	MTP Set	2

3	Biopsy Cervical Set*	2

4	D & C Set	2

Forceps sponge holding, 22.5 cm straight – ss	6 Pc
Speculum, vaginal, Sim's, double-ended # 3-ss	1 Pc
Forceps, tissue, spring-type, 1 x 2 teeth, 160 mm, stainless steel	2 Pc
Forceps, Vulsellum, duplay double curved, 280 mm-ss	1 Pc

Sound uterine, Simmpson, 300mm with 200mm gradation	1 Pc
Dilator uterine double ended Hegar set of 5	1 set
Curette, uterine, sim's blunt, 26cmX11mm size#4ss2	1Pc
Curette, uterine, sim's sharp, 26cmX11mm size#4ss2	1Pc
Forceps, artery, Spencer-Wells, straight, 140 mm-ss	1 Pc
Forceps, ovum, Kantz, 290mm, stainless steel 1	1 Pc

5	I.U.C.D. Kit	2

6	LSCS set	2

7	MVA Kit	2

8	Vaginal Hysterectomy	2

9	Proctoscopy Set*	2

10	P.V. Tray*	3
11	Abdominal Hysterectomy set	2

12	Laparotomy Set	3

13	Formaline dispenser	4

—Multipur, Stainless Steel body, Automatic Timer.
S.S. (304 grade)

SUITRABLE for fumigation decontamination of operation theatres, Wards in Hospitals & Nursing Homes, Pharmaceutical labs.
Should be able to Instantly convert liquid formalin into true aerosol particles. And create 100% sterile germ free and Zero –

Bacteria environment.
A single ‘MULTIPUR’ unit should be able to
sterilize 250 cu. mtrs about 7000 cu.ft in just 30–60 minutes.

Suitable to work on 220 V, single phase, 50 Hz, AC supply.
Trough Capacity :–

- 3.0 Liters
- 1.5 Liters

14	Kick Bucket	10
15	General Surgical Instrument Set Piles, Fistula, Fissure*	2
16	Knee hammer	5
17	Hernia, Hydrocele*	2
18	Varicosevein etc*	1
19	Gynaec Electric Cautery	1
20	Vaginal Examination set*	22
21	Suturing Set*	7

22	MTP suction apparatus	2

SALIENT FEATURES:

IS: 4533

- Most durable high powered
- Instant vacuum
- Versatile for ,MTP & other major surgical Applications
- Least maintenance.
- Stainless Steel top
- Heavy duty antistatic castors
- Unique removable filter
- Card stowage arrangement
- Non-collapsible tube with adaptors

TECHNICAL SPECIFICATIONS:

Vacuum	:	700mm/hg: Regulable Smooth Vacuum Control Knob.
Gauge	:	Bourden Type 100mmdia. 0-760 mm Hg caliberation.
Volume	:	25-30 L/min (Jars capacity 3 Ltrs.)
Jars	:	Graduated Glass Wide Mouth 2 x 1.5 Ltrs. Self Sealing Rubber Lids with Overflow Safety Device.
Sound	:	45 db AII±3. Almost noiseless.
Body	:	M.S.Spot Welded with SS Top& Epoxy Powder Coated Finish
Power	:	2200-230V, AC: 50 HZ

32	Thomas Splint	9

All sizes & types made of steel, fine finish.

34	Mini Surgery Set*	2

36	Surgical Package for Cholecystectomy*	1

37	Surgical package for Thyroid	1

38	GI Operation Set*	2

39	Appendicectomy set *	2

40	L.P.Tray*	7

41	Uretheral Dilator Set	4

42	TURP resectoscope *	1

XII. ENDOSCOPY EQUIPMENTS

1	Laparoscope diagnostic and for sterilisation *	2

XIII. ANAESTHESIA EQUIPMENTS

1	Anaesthetic - laryngoscope magills with four blades	5

ANESTHESIA MACHINE with accessories :- Workstation without monitor

OPTION-I

Specifications of Anesthesia Machine 2 Gases with 3 tube Hypoxic Guard Including Ventilator and Vaporizers

1. Machine must be made of rigid & electro statically powder coated steel with antistatic Castors with front brakes.
2. Machine should be equipped with 2 Nos. High Pressure outlets for driving ventilator.
3. Machine must have Oxygen Flush with 32 to 59 LPM flow or better.
4. The machine must have flow meter for oxygen and nitrous oxide supply with adjustment controls. Oxygen Flow meter can be calibrated from 100 ml to 8 Liters and for Nitrous Oxide from 200 ml to 12 liters per min.
5. Machine should have pneumatically controlled integrated Hypoxic Guard/ORC ensuring that a minimum range of 25%-35% oxygen can be run through the machine as per requirement (25% can be set) .
6. **The machine must have inbuilt Oxygen Failure Warning Alarm.**
7. Machine has a common gas outlet Male and Female Type, size to specify.
8. Machine should have provision for connection to pipeline supply for Oxygen and Nitrous Oxide Supply. **Once pipeline supply is turned on machine should be able to use pipeline supply and cylinders supply be kept as reserve and incase of pipeline failure only cylinder supply can be turned on.** Separate indication gauges for Pipeline and Cylinder Pressure.
9. Machine must have a **system pressure relief valve** to protect from backpressure. The valve set at normal pressure of 200 cm of H20.
10. Provision for mounting **2 Nos of Bulk Cylinders** on the extended rear platform & **top tray** for mounting monitor at eye level.
11. Machine has gas specific pin indexed cylinder yokes with sliding stainless steel clamping bars for easy handling. Two each for oxygen and nitrous oxide cylinder with 5 liters capacity.
12. There should be individual pressure regulator on each circuit output phase of 4 kg/cm² and Capable of delivering low flow Anesthesia
13. Provision for mounting of ventilator on the side, writing table and pre-use operative checklist and two closed drawer for keeping essential accessories.
14. Machine must be supplied with twin canister circle absorber. The absorber has switch control to switch between Automatic and Manual mode of ventilator.
15. One Set of Essential Accessories with item wise rate should be quoted as option.
16. The supplier has adequate service backup with service, availability of on-self spares and calibration equipment in north east.
17. Accessories –
    a. Laryngeal mask airway(LMA) size 1,1.5,2,2.5,3,4,5 – 10 each
    b. Proseal LMA size 3,4 – 10 each
    c. I-gel size 3 – 10 each
    d. Incubeting LMA- 2 ns.
    e. Combitube – 2 nos.
    f. Central venous canula – 16G,18G,20G – 50 nos. each
    g. Oropheryngeal airways assorted size – 10 each
    h. Lumber puncture needle size 22G, 23G, 24G - 10 each
    i. Mini tracheostomy kit/cricotheridectomy kit

I. **Warranty/Guarantee**:

Three (3) years warranty/Guarantee for the machines/equipments as mentioned above with spare parts from the date of installation, commissioning and handing over. The up gradation of all the software shall be done free of cost during the warranty period.

II. **95% Uptime**:

95% uptime guarantee (7 days a week for 24 hrs per day) must be provided during the warranty and CMC periods. If the downtime exceeds 5% the warranty/CMC would be extended accordingly for double the period of breakdown time.

III. **Comprehensive Maintenance Contract (CMC):**

CMC (Labour+ Spare) for next four years after completion of warranty period to be quoted. It will include periodic preventive maintenance and up gradation of software free of cost during CMC period. The rate quoted will be loaded/included in the ranking/comparison purpose. The payment of CMC will be made on yearly basis after satisfactory services during the CMC period.

IV. **Training on the operation of the Machine**:

The successful bidder shall have to provide training on the operation of the machine/equipment/instrument to the designated Doctors and Paramedical Staffs at the consignee's location free of cost.

2	Endo tracheal tubes sets Red Rubber, Cuffed as well as plain all sizes to be quoted	3
3	Magills forceps (two sizes)	8
4	Connector set of six for E.T.T	8
5	Tubes connecting for ETT	10
6	Air way female*	10
7	Air way male*	20

8	Mouth prop*	10
9	Tongue depressors*	12
11	O2 cylyinder for Boyles	12

Brand New High Pressure Seamless Cylinders for Oxygen Gas, duly filled with gas 'A' type. Having water Capacity 5 Litres, Cylinders Are "ISI" Marked, Conforming To IS: 7285 Specification, fitted with Pin Index flush type Valve, painted as specified under gas cylinders rules 1981.

12	N2O Cylinder for Boyles	12

Brand New High Pressure Seamless Cylinders For Nitrous Oxide Gas, duly filled with gas, 'A' type. Having water Capacity 5 Litres, Cylinders Are "ISI" Marked, Conforming To IS: 7285 Specification, fitted with Pin Index flush type Valve, painted as specified under gas cylinders rules 1981.

13	CO2 cylinder for laparoscope*	5

CO2 Cylinder 10 lts for Endoscopic procedure with accessories

14	PFT machine	1
15	Boyles Apparatus with Fluotec and circle absorber	2
16	Exchange Transfusion Sets*	

XIII. FURNITURE & HOSPITAL ACCESSORIES

1	Doctor's chair for OP Ward, Blood Bank, Lab etc.	50

- Cushioned seat and back.
- Pneumatic height adjustable.
- Height adjustable and swinging back rest
- 5 legs chrome plated base with foot ring
  Base fitted with 50 mm dia castors

2	Doctor's Table	25
3	Duty Table for Nurses	15
4	Table for Sterilisation use (medium)	12
5	Long Benches(6 1/2' x 1 1/2')	40
6	Stool Wooden Steel	40
7	Stools Revolving	15

Height adjustment : 450mm to 680mm
Finish : White/Cream/Grey powder coated
4-legged upholstered, Tabular pipe 25mm dia.
Mounted on rubber shoes.

8	Steel Cup-board	25
9	Wooden Cup Board	15
10	Racks -Steel – Wooden	12
11	Patients Waiting Chairs (Moulded) *	30

All sizes & all types. Frame made of steel & seat plastic

12	Attendants Cots *	15
13	Office Chairs	8
14	Office Table	10
15	Foot Stools *	30

OPTION-I

Frame made of tubular steel with Alm. Stripss top

Single, Double

OPTION-II

SINGLE

- 18" x 9" x 9" .
- 31 mm x 1.22 mm m.s. tubular legs fitted with PVC stumps.
- 20 G M.S. top fixed with rubber matting ad aluminum beedings.
- Pre-treated & Epoxy Powder Coated.

DOUBLE

- 18" x 18" x 18".
- 25 mm x 1.22 mm CRC and 19 mm x 1.22 mm supporting tubular frame fitted with PVC stump.
- 20 G CRC sheet duly double press bent.
- Pre-treated and Epoxy Powder Coated.

OPTION-III

Foot Step

Specification –

448 x 224 x 224 mm, Heavy Frame.
MS Tubular legs fitted with PVC stumps
MS top fixed with rubber matting and aluminium biddings
Pre-treated and epoxy powder coated -

II. Warranty/Guarantee:

III. Comprehensive Maintenance Contract (CMC):

16	Filing Cabinets (for records) *	10
17	M.R.D.Requirements (record room use) *	1
18	Paediatric cots with railings	5

1370 x 760 x 610 mm Height. Side rails Extended 610 mm above mattress base. Tubular Tube Framework. Top of M.S. sheet with perporations. Built in back rest. Mounted on 100 mm dia castor wheels. Epoxy powder coated With water proof mattress.

19	Cradle*	5
20	Fowler's cot	2
21	Ortho Facture Table*	1

22	Hospital Cots (ISI Model)	300
23	Hospital Cots Paediatric (ISI Model)	15
24	Wooden Blocks (Set)*	5
25	Back rest*	8
26	Dressing Trolley (SS)	8
27	Medicine Almairah	5
28	Bin racks (steel)*	10
29	ICCU Cots	6

30	Bed Side Screen	As per requirement

Size 66" x 96" made of 1" tubular pipe mounted on 5 cms dia castors with spring wire. White finished.

OPTION-II

- 66"H x 96"L .
- 19 mm x 1.22 mm tubular frame work.
- Legs made of 25 mm x 25 mm x 1.22 mm CRC scare tubes fitted with 50 mm dia castors
- Pre-treated and Epoxy Powder Coated.

31	Medicine Trolley(SS)	8

(CASSETTE TYPE)

- Should be designed to supply medication when nurse make of visit around the patients.
- Two sides unit cassette and one side plate cassette
- Installed multi-bin container at rear side to make easy and multi- storing possible
- Multi structure can be possible used by kinds of accessories
- Designed push-handle and efficient structure
- Total lock key system
- Size: 778 (L) x 488 (D) x 918 (H) minimum
- 781 (L) x 491 (D) x 921 (H) maximum

32	Case Sheet Holders with clip(S.S.)*	120

230mm x 330 mm SS sheet.

33	Bed Side Lockers (SS)*	0

OPTION-I

1. Deluxe 40 x 40 x 82 H cm.
2. Closed cabinet of steel sheet.
3. Stainless steel top and shelve.
4. One drawer and box.
5. Mounted on four 50 mm dia.
6. Castor wheels.
7. Powder coated finish

OPTION-II

- 16" L x 16" W x 32" H.

- 25 mm x 25 mm x 1.22 mm CRC tubular pipe construction fitted PVC stumps assembled to 22 G M.S. cupboard.
- 22 G stainless steel top.
- Epoxy Powder Coated.

OPTION-II

Bed Side Locker SS

I. Specification –

Machine pressed complete locker box, closed from three sides and a suitable drawer for extra storage. - Stainless steel top. - Complete locker mounted on four 5 cm. dia. castors with rubber buffers at the rear. - Pre-treated and powder coated

I. **Warranty/Guarantee**:

Three (3) years warranty/Guarantee for the machines/equipments as mentioned above with spare parts from the date of installation, commissioning and handing over. The up gradation of all the software shall be done free of cost during the warranty period.

II. **95% Uptime**:

95% uptime guarantee (7 days a week for 24 hrs per day) must be provided during the warranty and CMC periods. If the downtime exceeds 5% the warranty/CMC would be extended accordingly for double the period of breakdown time.

34	Examination Couch (SS)	5

With 3 drawers & cup-board sliding with lock & key upholstered top in 2 sections . Head rest adjustable with gas spring water proof fixed mattress.

OPTION-II

- Overall Approx. Size : 187L x 51W x 81H.
- Adjustable backrest by gas spring system.
- Two section foam padded, upholstered top.
- Three drawers, three cabinets. Tray for B.P. apparatus.

Pre-treated & Epoxy Powder Coated.

35	Instrument Trolley (SS)	10

OPTION-I

Instrument trolley stainless steel Mounted on 10 cms castors

OPTION-II

- 19 mm x 1.22 mm CRC tubular frame work mounted on 7.5 cms castors.
- 22 G two S.S. Shelves with three side railing on top shelf.
- Pre-treated and Epoxy Powder Coated finish
- Knock down construction

Overall size : 60x46x81 cms.

OPTION-III

Instrument Trolley

Tubular frame powder coated with two heavy S.S. shelves. -Mounted on four castors of 7.5-10cm. - Protective railing on three sides around both shelves. - With bowl and tray attachment. - Size: 65-68 x 43-45 x 88-90cm.

I. **Warranty/Guarantee**:

Three (3) years warranty/Guarantee for the machines/equipments as mentioned above with spare parts from the date of installation, commissioning and handing over. The up gradation of all the software shall be done free of cost during the warranty period.

II. **95% Uptime**:

95% uptime guarantee (7 days a week for 24 hrs per day) must be provided during the warranty and CMC periods. If the downtime exceeds 5% the warranty/CMC would be extended accordingly for double the period of breakdown time.

36	Instrument Trolley Mayos (SS)	6

The top is constructed from
-Wood with melamine finish
-Stainless Steel
-Detachable Stainless Steel Tray
Mounted on four 50mm (2") castor wheels.
Finish: Epoxy powder coated .(White/Ivory/Grey).
Size: 25" X 17" X 6" Weight: 9 kg

OPTION-II

- Tray size : 56L x 40W cms of 20G S.S. Sheet
- 50 mm x 30 mm x 1.22 mm rectangular CRC tubes mounted on 5 cms castor
- Height adjustable 32" to 42" by side knob.
- Pre-treated and Epoxy Powder Coated finish.

38	Wheel Chair (SS)	10
39	Stretcher / Patience Trolley (SS)	10
40	Instrument Tray (SS) Assorted	60

41	Kidney Tray (SS) - Assorted	60

Sizes: 150 X 70
200 X 90
250 X 100
300 X 130

45	Delivery Table (SS Full)	10

Size: 72"x 27" x 30" frame.
Should be made of heavy tubular stainless steel With strong mechanism to raise the top on leg side. Fitted with Stainless Top in three sections. Head rest in Middle & U- Cut at the Leg end. Complete with Lithotomic rods with straps, self Locking Traction Handle & I. V. Rod. (S.S.

47	O2 Cylinder Trolley(SS)	12

- For 10.2 Ltr capacity B Type Oxygen Cylinder
- 25 mm x 1.22 mm CRC tubular frame work.
- Two 10 cms castors.
- 16 G M.S. sheet base plate.
- Pre-treated and Epoxy Powder Coated finish.

48	Saline Stand (SS)	50

IV Stand mounted on five leg base with castors. Stainless steel pipe with stainless steel IV rod
OPTION-II

- 31 mm x 1.22 mm M.S. Tubular pipe.
- 50 mm x 30 mm x 1.22 mm four legs base with 5 cms castors.
- 12 mm S.S. rod with 9 mm double hook adjustable from 137 to 240 cms.

Pre-treated and Epoxy Powder Coated .

48	Waste Bucket (SS)*	75

Stainless steel, foot pedal operated with take out bucket

49	Dispensing Table Wooden	2

50	Bed Pan (SS)*	40

Stainless Steel.` **BED PAN PERFECTION S.S (POPULAR QUALITY)** With Cover Bed Pan Male Slipper Type
Made of Stainless Steel.` Male Female

51	Urinal Male and Female	40
53	Kitchen Utensils*	For 200-300 persons
54	Containers for kitchen*	For 200-300 persons
55	Plate, Tumblers*	For 200-300 persons
56	Waste Disposal - Bin / drums	15
57	Waste Disposal - Trolley (SS)	3
58	Linen Almirah	5
59	Stores Almirah	5
60	Arm Board Adult*	15

61	Arm Board Child*	15
62	SS Bucket with Lid	10
63	Bucket Plastic*	10
64	Ambu bags	10
65	O2 Cylinder with spanner ward type	40
66	Diet trolley - stainless steel	2
67	Needle cutter and melter	25
68	Thermometer clinical *	30
69	Thermometer Rectal*	5

70	Torch light*	12
71	Cheatles forceps assortted*	12
72	Stomach wash equipment*	5
75	Emergency Resuscitation Kit-Adult*	2
76	Enema Set*	8

With Handle, Hook & Nipple 1.5Ltr (202 Grade S.S.)

77.

1. Hospital Bed with stand

Specification – 2090 mm L x 910 mm W x 600 mm H Bed frame approx dimension: 1980 mm L x 910 mm W. Pre treated & powder coated finish. Sockets for mosquito with MN Poles.

2. **ICU Beds** :

Specification –

- Should have adjustable backrest , upper leg height & trendelenburg/reverse trendelenburg positions on separate crank mechanisms, provided at foot end of the bed.
- Overall approx dimension : 2180 x mm L x 1010 mm W
- Bed Frame approx dimension : 2095 mm L x 920 mm W
- Minimum Height 490 mm approx (without mattress)
- Maximum height 710 mm approx (without mattress)
- 125 mm dia castor wheels with hig grade synthetic body, two with brake and two without brake.
- Four corner side buffers
- Pre- treated & powder coated finish
- Supplied in SKD condition.

3. Labour Table

Specifications :

Overall approx extended dimension : 1800 MM L x 900 mm W x 800 mm H. Three section top. Backrest adjustable on ratchet. Middle section with 'U' cut. Leg section can

be telescoped under the main frame completely for lithotomy positions. Foot operated gas spring assisted tredelenburg position. Complete with SS head & side railings, SS hand grips, a pair of rubber padded Ss lithotomy rods with rexine ankle straps Ss bowl. Supplied in SKD condition.

4. OT Table

Specifications :

Operating Table undergoes strict safety inspections and is designed to run at low voltage for safety. Six section translucent top radiographic sheet thickness 12 mm. The table height can be adjusted between 762mm to 1067mm for best posture during surgery. Each position is set by the hand switch controller & the operation buttons. Base column covered with Stainless Steel panel. An emergency power supply is added for use during Power outages.(Optional) Leg section and Head section are interchangeable. Blue rubberized mattress thickness 5cm.

RECOMMENDED ALLOCATION OF BED STRENGTH AT VARIOUS LEVELS

RECOMMENDED ALLOCATION OF BED STRENGTH

Sl. No	Item	Type	District Headquarters Hospital (201-300 bedded)
1	General Medicine	Beds (M+F)	25+25
2	New born ward	Beds	5
3	Mothers room with dining and toilets	Beds	5
4	Paediatrics ward	Beds	20
5	Critical care ward – IMCU	Beds	10
6	Isolation Ward	Beds	5
7	Dialysis unit (as per specifications)	Beds	3
8	Thoracic medicine ward with room for pulmonary function test	Beds (M+F)	5+5
9	Blood bank		Yes
10	General surgery ward (incl. Urology, ENT)	Beds (M+F)	25+20
11	Post – Operative Ward	Beds (M+F)	10+10
12	Accident and Trauma ward	Beds	10
13	Labour room	Boards	8
14	Labour room (Eclampsia)	Beds	3
15	Septic Labour room	Boards	2
16	Ante-natal ward	Beds	15
17	Post-natal ward	Beds	15
18	Postpartum ward	Beds	30
19	Post operative ward	Beds	20
20	Ophthalmology ward	Beds	10
21	Burns Ward	Beds	5

* including ophthalmic ward. $ including post – caesarean patients # including paediatric beds @ 10% Paying Wards

XIII. POST MORTEM EQUIPMENTS

1	Mortuary table (Stainless steel) *	2

Autopsy table are specially for all kinds of postmortem work. The construction of these tables incorporates state-of-the-art engineering, heavy gage stainless steel and conveniences. Autopsy stainless steel table mounted on stainless steel Tubular stand. Scientifically designed for maximum efficiency. Provided with two nos 6" wide body -supports (stainless steel) Removable type, six position headrest crusher (grinder aspirator) For disposal, chrome plated swing spout mixing faccuet for hot And cold water, lever handle for waste/drain and deep & large S.S. Sink with overflow.

2	P.M.equipments (list)	6

MOBILE TROLLEY TO TAKE DEAD BODY FROM COLD ROOM TO AIDS *INFECTIOUS DISEASE ROOM, AUTOPSY ROOM & BATH:

Used to take body from cold room to AIDS & infection disease room autopsy room & bath. Trolley with gas foot jack, 4 wheels, 3 with brake and a cold chamber style body tray. Can be used as a transporting trolley or treatment table.

(ii) DISSECTING SINK:

An addition to post mortem laboratory equipment. No floor fixings. Fixes to the wall for optimum hygiene and upkeep. Made entirely of 304 grade stainless steel with satin finish. One surface for washing – sink and elbow operated hot & cold mixer. Open drainage level allowing trolley tables to be put in place. Sink for waste liquid. Flexible spray.

(iii)MANUAL CALAVER LIFT:

Tubular frame with:-

* Steering handles
* Guidance rails with body tray holding system
* 4 rotating wheels, two with brakes
* Regulating desent value
* Hydraulic foot pump

Comes in anti-corrosion treated soft steel. Hammer wrought grey paint stainless steel. Also available-wheeled body tray carrier with brake length mm: 675. <Min height mm: 320 max height.

(iv) MORGUE ELECTRIC (SUCTION PUMPS):

ISI Marked

Suction Apparatus – Type – 1 High Power, Suction Apparatus Cabinet made of Mild Steel, Epoxy Powder coated. Multipurpose, Quick Action & most Durable ISI Marked, Pump suitable for operation in dead Bodies.

(v)DEEP FREEZER (4-BODIES-2, 2-BODIES-1):

In case the cadaverous is to preserve for longer time for legal Reasons or otherwise, it is very useful. Description similar to DM-177 but temperature range from -15ºC to 20ºC. Environmental friendly (CFC free) refrigerant, PUFF insulated.

N.B.: The above units can be designed to be used as cold Storage also
Capacity :
Two bodies
Four bodies
Optional : Stabilizer for above

Two bodies……..4 KVA
Four bodies…….7.5 KVA

(vi) BODY WEIGHING MACHINE DIGITAL DISPLAY

Body Weighing Machine Digital Display

* Capacity: 200KG
* Graduation: 50 GM
* Display: 06", High Red Led Display
* Power Supply: AC 220 W/ Built in Rechargeable Battery
* Options: Remote Display, RS. 232 Interface
* Display device: LCD display
* Scale would be bright, easy to read and clear
* Operating brightness: 250-300 LUX
* Would be powered by batteries
* Weighing capacity: 2 Kilograms

(vii) POSTMORTEM DISSECTION SET:

Option (a):

Strongwood case.Suitable for all types of anatomical Pathology.

Contents:

- • 4 dossection scalpels
- 1 rachett
- 1cartilage knife
- 2 retractors with 2 double claw
- 1 autopsy knife
- 2 double tubed insufflators
- 114.5 cm pair of incision scissors
- 2 olivaires stylets
- 1 pair of bone shears
- 4 suturing needles
- 1 pair of bowl scissors
- 1 tape measure
- 2 dissection pilers
- 1 100cc test tube
- 1 amputation saw
- 2 chisel
- 1 hammer

Option (b):

Stainless steel (BEST QUALITY) box containing all necessary instruments.

Contents:

- 1 cartilage knife 8 cm blade
- 1 mallet 20 cm

- 1 autopsy knife , 13cm blade
- 1 straight rachett,20cm
- 1 pair of bowel scissors , 20cm
- 1 pair of rib shears
- 1 pair of straight Liston sheers 19cm
- 1 Satterlee saw 29cm
- 1 pair of dissection pliers with claws 16cm
- 1 Weitianer retractor
- 1 pair of dissection pliers without claws 16cm

(viii) <u>MOBILE & X-RAY MACHINE</u>

60Ma, 100 kv, 4.8 kw Self contained, Full wave diagnostic X-ray generator with dynamic mAs selection facilities for optimum use of tube capacity.

Radiographic Output: 60mA at 100kv
50mA at 100kv
40mA at 100kv
20mA at 100kv

Control panel which is attractive and ergonomic, easy-to-use, control switches, 5 LEDs to indicate the line voltage, line voltage compensator course & fine with compensating range from 185V to 260Vkb selection 40 to 100 Kv in steps of 2 Kv , Solid Taste timer with time variations 0.04 sec to 5.0 in 23 steps, automatic overload indication & protection, digital display of Kv, mA & mAs. Tube headed complete with DSA -3-100/25 stationery anode tube, HT transformer, filament transformer, silicon rectifier-all oil immersed and hermetically sealed.

ONE Light Beam Collimator for centering

MOBILDRIVE – It is a sleek designed mobile stand with cantilever up down movements , long reach, fully balanced tube arm based on international design enables various quick and precise positioning. Specially designed brakes and 3 heavy duty castor wheels ensures easy mobility even on slopes, inclines & ramps within the hospital wards or in ICCU. The stand also have integrated cassette box for better cassette handling.

STANDARD ACCESSORIES-
1. FFD measuring scale
2. Double stop exposure switch
3. Mains cable with 15 amp, 3 pin top
4. Operation Manual

(ix) <u>METAL DETECTOR:</u>

Hand Held Metal Detector

- Fully automatic self adjusting circuits
- Simple push-button operation
- Instant response, clear audible alarm
- No false alarms light weight, easy to carry
- Low field strength – no affect on pacemakers and magnetic tapes
- Detect ferrous , non-ferrous , ferrite road
- Metal concealed with ferrite rods
- Break – resistant ABS/Nylon Plastic moulded cabinet

(x) <u>ELECTRIC SAW:</u>

- Speed : 14000 oscillations

- Voltage : 230 volts
- Weight : 1.3 kg
- Noise Level : 70 Db(A)
- Length : 333 mm

3	Weighing machines (Organs)	2

- Display device: LCD display
- Scale would be bright, easy to read and clear
- Operating brightness : 250-300 lux
- Would be powered by batteries.
- Display resolution: 2 gms
- Weighing capacity: 2 kgs

4	Measuring glasses(liquids)	4

5	Aprons*	10

6	PM gloves (Pairs)*	20

7	Rubber sheets*	

8	Lens	2

9	Spot lights	4

XIII. LINEN

1	Table cloth	75
2	Draw sheet	150
3	Doctor's overcoat	90
4	Hospital worker OT coat	400
5	Patients house coat (for female)	900
6	Patients Pyjama (for male) Shirt	400
7	Over shoes pairs	100
8	Paediatric Mattress	40
9	Abdominal sheets for OT	200
10	Pereneal sheets for OT	200
11	Leggings	150
12	Uniform / Apron	
13	Mortuary sheet	70

14	Mats (Nylon)	200
15	Mackin tosh sheet (in meters)	300
16	Apron for cook	

XIII. TEACHING EQUIPMENT

S. No.	Name of the Equipment	District Headquarters Hospital (201-300 bedded)
1	Slide Projector	
2	O.H.P	1
3	Screen	1

XIX. REFRIGERATION & AC

1	Central A/C for OT	1